

Welcome to STN International! Enter x:x

LOGINID:sssptal&56sxc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Apr 08 "Ask CAS" for self-help around the clock  
NEWS 3 Apr 09 REILSTEIN: Reload and Implementation of a New Subject Area  
NEWS 4 Apr 09 SDB will be removed from STN  
NEWS 5 Apr 10 US Patent Applications available in IFICDB, IFIPAT, and  
IFIUDB  
NEWS 6 Apr 10 Records from IP.com available in CAPLUS, HCAPLUS, and  
ZCAPLUS  
NEWS 7 Apr 10 BICISIS Gene Names now available in TOXCENTER  
NEWS 8 Apr 10 Federal Research in Progress (FEDRIP) now available  
NEWS 9 Jun 03 New e-mail delivery for search results now available  
NEWS 10 Jun 10 MEDLINE Reload  
NEWS 11 Jun 10 PCTFILE has been reloaded  
NEWS 12 Jul 01 POFEGE no longer contains STANDARDS file segment  
NEWS 13 Jul 21 USAN to be reloaded July 26, 2002;  
saved answer sets no longer valid  
NEWS 14 Jul 21 Enhanced polymer searching in REGISTRY  
NEWS 15 Jul 3 NETPIEST to be removed from STN  
NEWS 16 Aug 01 CANCERLIT reload  
NEWS 17 Aug 01 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 18 Aug 01 NTIS has been reloaded and enhanced  
NEWS 19 Aug 18 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 20 Aug 18 IFIPAT, IFICDB, and IFIUDB have been reloaded  
NEWS 21 Aug 18 The MEDLINE file segment of TOXCENTER has been reloaded  
NEWS 22 Aug 21 Sequence searching in REGISTRY enhanced  
NEWS 23 Sep 01 CAPIO has been reloaded and enhanced  
NEWS 24 Sep 1 CAPIO properties added to the REGISTRY file  
NEWS 25 Sep 17 Indexing added to some pre-1987 records in CA/CAPLUS  
NEWS 26 Sep 17 CA Section Thesaurus available in CAPLUS and CA  
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1987 to 1985  
NEWS 28 Oct 21 EVFNTLINE has been reloaded  
  
NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0a(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTERNET General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer Agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

result in loss of user privileges and other penalties.

\* \* \* \* \* STN Colombia \* \* \* \* \*

FILE 'HOME' ENTERED AT 12:12:31 ON 24 OCT 2002

= FIL BIOSIS MEDLINE EMBASE LIFESCI CAPLUS  
COST IN U.S. DOLLARS SINCE FILE TOTAL  
SESSION  
FULL ESTIMATED COST ENTRY 0.21 SESSION 0.21

FILE 'BIOSIS' ENTERED AT 12:12:43 ON 24 OCT 2002  
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC. (BAI)

FILE 'MEDLINE' ENTERED AT 12:12:43 ON 24 OCT 2002

FILE 'EMBASE' ENTERED AT 12:12:43 ON 24 OCT 2002  
COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

FILE 'LIFESCI' ENTERED AT 12:12:43 ON 24 OCT 2002  
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'CAPLUS' ENTERED AT 12:12:43 ON 24 OCT 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

```
= . s genetic(w) material or DNA or RNA (2a) extract? or isolat?  
2 FILES SEARCHED...  
4 FILES SEARCHED...  
LI 5:13869 GENETIC(W) MATERIAL OR DNA OR RNA (2A) EXTRACT? OR ISOLAT?
```

L1 E05809 L1 (S) COLUMN OR IMMOBILIZ?

Is it a label?

= . S 13? (S) RADICAL ADJ1 MEDIAT?

= . S. L3 (S) RADICAL(W) MEDIAT?

$$= \cdot - \mathbf{d} - \mathbf{1} \cdot \mathbf{1} = \mathbf{1} - \mathbf{d}$$

ANSWER TO 4 LETTER CORRECTION AND BIOASSAY ABSTRACTS INC.  
AN 1993:119008 BIOSIS  
DU PPEV19990011190009  
TI Increased DNA oxidation and decreased levels of repair products in Alzheimer's disease ventricular CSF.  
AU Lovell, Mark A.; Gabrita, S. Prasad; Markesberry, William R. et al.  
CL 111 Sanders-Brown Build., Univ. Kentucky, Lexington, KY 40536-0720  
JN Journal of Neurochemistry, Feb., 1993 Vol. 52, No. 2, pp. 571-576.  
SO ISSN: 0360-5342.  
PT Article

LA English

LS ANSWER 2 OF 4 MEDLINE  
AN 1999127942 MEDLINE  
DN 991\_7942 PubMed ID: 9930752  
TI Increased DNA oxidation and decreased levels of repair products in Alzheimer's disease ventricular CSF.  
AU Lovell M A; Gabbita S P; Markesberry W R  
CS Sanders-Brown Center on Aging, and Department of Chemistry, University of Kentucky, Lexington 40536-0230, USA.  
NC IPOS-AGI5118 (NIA)  
SPS-AGI5144 (NIA)  
SO JOURNAL OF NEUROCHEMISTRY, (1999 Feb) 72 (2) 771-6.  
Journal code: 2630190R. ISSN: 0022-3042.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 1P3K02  
ED Entered STN: 199901223  
Last Updated on STN: 199901223  
Entered Medline: 199901211

LS ANSWER 3 OF 4 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
AN 1999C42164 EMBASE  
TI Increased DNA oxidation and decreased levels of repair products in Alzheimer's disease ventricular CSF.  
AU Lovell M.A.; Gabbita S.P.; Markesberry W.R.  
CS Dr. W.R. Markesberry, 101 Sanders-Brown Building, University of Kentucky, Lexington, KY 40536-0230, United States  
SO Journal of Neurochemistry, 1999; 72/2 (771-776).  
Bpts: 44  
ISSN: 1021-3542 CODEN: JONHA  
CY United States  
DT Journal; Article  
FS 001 General Pathology and Pathological Anatomy  
003 Neurology and Neurosurgery  
LA English  
SL English

LS ANSWER 4 OF 4 LIFESCI COPYRIGHT 2002 CSA  
AN 1999:95511 LIFESCI  
TI Increased DNA Oxidation and Decreased Levels of Repair Products in Alzheimer's Disease Ventricular CSF  
AU Lovell, M.A.; Gabbita, S.P.; Markesberry, W.R.\*  
CS 101 Sanders-Brown Building, University of Kentucky, Lexington, KY 40536-0230, USA  
SO Journal of Neurochemistry [J. Neurochem.], (19990200) vol. 72, no. 2, pp. 771-776.  
ISSN: 0022-3042.  
PT Journal  
FS N3  
LA English  
SL English

END

--Logging off of STN--

=>  
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	36.21	36.42

STN INTERNATIONAL LOGOFF AT 12:19:22 ON 24 OCT 2002

10 OF 46 CAPLUS COPYRIGHT 2002 ACS  
AN 1999:526234 CAPLUS  
DN 131:308477

TI Fluorescent labelling of closely-spaced aldehydes induced in  
**DNA by bleomycin-Fe(III)**  
AU Chakrabarti, S.; Mahmood, A.; Makrigiorgos, G. M.  
CS Joint Center for Radiation Therapy and Dana Farber Cancer Institute,  
Harvard Medical School, Boston, MA, 02215, USA  
SC International Journal of Radiation Biology (1999), 75(8), 1055-1065  
CODEN: IJRBET; ISSN: 1355-3002  
PB Taylor & Francis Ltd.  
DT Journal  
LA English  
AB The purpose of this study was to test the ability of two novel fluorescent reagents fluorescent aldehyde-reactive probe (FARP) and FARPhe, to **label** aldehyde-contg. sites (principally abasic sites) generated in **DNA** by the radiomimetic drug bleomycin, and to use fluorescent energy transfer from FARPhe (donor) to FARP (acceptor) to quantitate such closely-spaced sites. FARPhe, 7-hydroxyscoumarin-3-carboxylic acid (((((amino-oxymethyl) carbonyl) hydrazino) carbonylethyl) amide) was synthesized with a protocol similar to the one recently reported for FARP (a fluorescein-based probe). Both FARPhe and FARP form stable imine bonds with the open-chain aldehydes generated upon acidic depurination of **DNA**. Plasmid **DNA** exposed to **bleomycin-Fe(III)**-ascorbate undergoes extensive strand breakage, and upon subsequent reaction with FARPhe and/or FARP it becomes fluorescently **labeled**, indicating the generation of aldehyde-contg. sites. The binding of the probes to calf thymus or plasmid **DNA** results in significant fluorescent energy transfer among closely-spaced fluorophores, as revealed by the fluorescence increase following digestion of fluorescently **labeled** samples with nuclease P1. The fluorescence quenching is most evident when both FARPhe and FARP are used simultaneously to trap aldehyde sites. When single-stranded **oligonucleotides** engineered to contain either one or two closely spaced bleomycin binding sites are exposed to bleomycin and then fluorescently **labeled**, the **oligonucleotides** demonstrate significantly increased fluorescent energy transfer with two binding sites indicating a dependence of aldehyde site generation and clustering on the local sequence of a single strand. In conclusion, a new detection method for **DNA** damage induced by bleomycin following fluorescent **labeling** of aldehyde group-contg. sites (FLAGs) and their clustering via fluorescent energy transfer is demonstrated. The method is applicable to any form of **DNA**. This work may lead to a general approach for the quantification of multiply damaged sites in **DNA**, a subset of **DNA** lesions that may have major biol. significance.

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

L3 ANSWER 8 OF 16 MEDLINE  
AN 97105898 MEDLINE  
DN 97105898 PubMed ID: 8948646  
TI Chemical methods of DNA and RNA fluorescent labeling.  
AU Proudnikov D; Mirzakekov A  
CS Engelhardt Institute of Molecular Biology, Moscow, Russia.  
SO NUCLEIC ACIDS RESEARCH, (1996 Nov 15) 24 (22) 4535-42.  
Journal code: Q8L; 0411011. ISSN: 0305-1048.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199701  
ED Entered STN: 19970219  
Last Updated on STN: 19970219  
Entered Medline: 19970117  
AB Several procedures have been described for fluorescent labeling of DNA and RNA. They are based on the introduction of aldehyde groups by partial depurination of DNA or oxidation of the 3'-terminal ribonucleoside in RNA by sodium periodate. Fluorescent labels with an **attached** hydrazine group are efficiently coupled with the aldehyde groups and the hydrazone bonds are stabilized by reduction with sodium cyanoborohydride. Alternatively, DNA can be quantitatively split at the depurinated sites with ethylenediamine. The aldimine bond between the aldehyde group in depurinated DNA or oxidized RNA and ethylenediamine is stabilized by reduction with sodium cyanoborohydride and the primary amine group introduced at these sites is used for **attachment** of isothiocyanate or succinimide derivatives of fluorescent dyes. The fluorescent DNA labeling can be carried out either in solution or on a reverse phase **column**. These procedures provide simple, inexpensive methods of multiple **DNA labeling** and of introducing one fluorescent dye molecule per RNA, as well as quantitative DNA fragmentation and incorporation of one label per fragment. These methods of fluorophore **attachment** were shown to be efficient for use in the hybridization of labeled RNA, DNA and DNA fragments with oligonucleotide microchips.

DUPPLICATE 3

L3 ANSWER 10 OF 16 MEDLINE DUPLICATE 4  
AN 94057384 MEDLINE  
DN 94057384 PubMed ID: 8238885  
TI Biotinylation of DNA on membrane **supports**: a procedure  
for preparation and easy control of **labeling** of nonradioactive  
single-stranded **nucleic** acid probes.  
AU Didenko V V  
CS Department of Immunology, Institute of Transplantology and Artificial  
Organs, Moscow, Russia.  
SO ANALYTICAL BIOCHEMISTRY, (1993 Aug 15) 213 (1) 75-8.  
Journal code: 4NK; 0370535. ISSN: 0003-2697.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199312  
ED Entered STN: 19940117  
Last Updated on STN: 19940117  
Entered Medline: 19931203  
AB We have used M13 single-stranded DNA **bound** by uv to small pieces  
of nylon membrane for the synthesis of biotinylated single-stranded DNA  
probes. The labeling method requires a large fragment of DNA polymerase I  
and random hexanucleotides. There is no need for previous linearization of  
the template. The clean probe is removed from the membrane by a single  
wash step. The synthesized probe is completely free of unincorporated  
precursors. This makes possible the easy control of the reaction of  
incorporation of biotinylated analogues into the probe by simple staining  
on the filter, thus allowing evaluation of the efficiency of labeling. The  
DNA membrane can be stored for reuse. With the procedure described it is  
possible to biotinylate many DNA fragments in parallel, simultaneously  
controlling the efficiency of labeling in a time- and cost-saving manner.